DOCUMENT RESUME

ED 088 973 UD 014 099

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TITLE Pygmalion in the Classroom: An Experimental Investigation of the Characteristics of Children on Teacher Expectancy.
PUB DATE May 73
NOTE 21p.; Paper presented at the Midwest Psychological Association annual meeting (Chicago, Illinois, May 1973)

EDRS PRICE MF-$0.75 HC-$1.50
DESCRIPTORS *Achievement Rating; Bias; Educational Diagnosis; *Elementary School Students; *Elementary School Teachers; *Expectation; Intelligence Differences; Perception; *Physical Characteristics; Prediction; Rating Scales; Sex Differences; Student Behavior; Student Evaluation; Teacher Influence

ABSTRACT

The present study investigated the effects of sex of child, level of attractiveness, and conduct on teacher ratings of academic ability, post high school training, vocation, and leadership potential. A total of 404 male and female classroom and special education (i.e., art, music, physical education) teachers in grades one to six, from a large school system in a metropolitan area, received a Student Progress Report with an attached color photograph of a boy or girl who had been previously rated as low, moderate, or high in physical attractiveness. The personal growth and attitudes section of the Student Progress Report were manipulated so that the conduct of the student was acceptable or unacceptable. A teacher evaluation form which asked the teacher to rate the student on several ability related dimensions accompanied the Student Progress Report. A total of 350 teachers (295 females and 55 males) or about 87 percent completed the evaluation form. The results show that children who are achievement oriented, accepted, cooperative, dependable, and self-controlled are perceived by teachers to be more academically capable and likely to achieve greater vocational success. It would appear that children with good conduct are the "chosen ones" in the elementary school, regardless of their level of physical attractiveness or sex. The prediction by teachers that poor conduct girls would be more intelligent than girls with acceptable conduct suggests that the rather passive, quiet girl is not viewed as possessing the intellectual capacity of one who is perhaps more assertive and less self-controlling. Further, girls who have high achievement motivation take on some characteristics of the male role. (Author/JM)

ED 088973

PYGMALION IN THE CLASSROOM: AN EXPERIMENTAL INVESTIGATION OF THE CHARACTERISTICS OF CHILDREN ON TEACHER EXPECTANCY *

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UD 014090

* Paper presented at the Annual meeting of the Midwestern Psychological Association, Chicago, May 10-12, 1973.

Abstract

The present study investigated the effects of physical attractiveness, sex of child, and conduct of the child on teacher expectations. Male and female teachers in the primary and elementary grades were asked to predict from the student's progress report: academic ability, level of aspiration, and leadership potential, of a boy or girl of low, moderate, or high physical attractiveness whose conduct evaluation was either acceptable or unacceptable. A color photograph of the student was attached to the report. Conduct level of the child influenced teacher predictions on all measures, while level of attractiveness and sex of the child appeared to exert little effect.

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THE CHOSEN ONES: A STUDY OF THE EFFECTS OF CHILDREN'S CONDUCT, SEX, AND FACIAL ATTRACTIVENESS ON TEACHER EXPECTATION[1]

Recent research on expectancy effects has shown that teachers form differential expectations for student performance and success. Further, these expectations are often based on personal impressions and other biasing influences. Rosenthal and Jacobson's (1968) controversial study on self-fulfilling prophecies demonstrated that students who were identified to teachers as having academic potential later made significant academic gains. Brophy and Good (1970), in an extension of this research, found that students, for whom teachers held high expectations, scored higher on classroom performance and achievement measures, and received more praise and less criticism than the low expectation students. In addition the high expectancy group more frequently initiated classroom and work related interactions, and were treated more favorably by teachers. Although the criticisms have been numerous (e.g., methodological problmes, etc.), and subsequent studies (e.g., Fleming & Anttonen, 1971; Jose & Cody, 1971) have failed to replicate the teacher expectancy effect, Rosenthal and Jacobson's research is important in pointing to potential biases in the school.

Physical attractiveness of the student appears to be another rather important factor influencing teacher evaluation of students. Clifford and Walster (1973) had a large number of fifth grade teachers predict IQ, educational potential, parent interest in school, and social status from a constructed student summary record of an above average student to which was attached a photo of a boy or girl. The photographs had been grouped into high or low attractiveness based on previous ratings of a group of

judges. Fifth grade teachers predicted that the attractive children were more intelligent, would attain more education, and had parents who were more concerned about academic achievement than less attractive children. Attractive children were also rated as having better peer relations. These teacher expectations occurred for both male and female teachers and were not influenced by sex of the child. Attractive children have also been perceived as less likely to be antisocial in a study by Dion (1972) where college students rated behavior descriptions of attractive and unattractive seven-year olds. Dion found that attractive children, who committed unacceptable acts, were perceived as more honest and pleasant than unattractive children with similar behavior reports.

Two additional factors which may influence teacher expectations are sex of the student and conduct. Clifford and Walster (1973) found that sex of student did not affect teacher predictions of academic ability, although girls tended to be rated higher on peer relations. However, Brophy and Good (1970) observed that boys, regardless of teacher expectancy, received significantly more behavior criticism. McCandless (1970) has suggested that teacher grades are generally lower for boys and the relationship between IQ and teacher grades is also lower. Overall it appears that conduct does influence teacher evaluations and boys are generally viewed more disapprovingly than girls (e.g., Beilin, 1959; Lippit & Gold, 1959; Longstreth, 1968; Sears & Feldman, 1966). While sex of the child mediates the influence of conduct, this sex effect is apparently absent for physical attractiveness according to the Clifford and Walster (1973) study.

The previous descussion suggests that physical attractiveness, sex of the child, and conduct are potential factors biasing teacher expectations, but to date no study has experimentally varied all three factors.

Further, the previous research on physical attractiveness (e.g., Clifford & Walster, 1973) has attempted to control for the the confounding effects of hair color, glasses, etc., on physical attractiveness by using several photographs of a rated level of attractiveness. It is questionable whether this constitutes a suitable control.

The present study investigated the effects of sex of child, level of attractiveness, and conduct on teacher ratings of academic ability, post high school training, vocation, and leadership potential. Only photographs of children without glasses and of similar hair color and length were used with both male and female elementary teachers. On the basis of the previous discussion, the following predictions were made: (1) Attractive children would be rated higher on all measures than unattractive children; (2) Children with good conduct would be rated higher than children with poor conduct; (3) Boys would be rated lower than girls.

Method

Subjects

A total of 404 male and female classroom and special education (i.e., art, music, physical education) teachers in grades one to six, from a large school system in a metropolitan area, received a Student Progress Report with an attached color photograph of a boy or girl who had been previously rated as low, moderate, or high in physical attractiveness. The personal growth and attitudes section of the Student Progress Report were manipulated so that the conduct of the student was acceptable or unacceptable. A teacher evaluation form which asked the teacher to rate the student on several ability related dimensions accompanied the Student Progress Report. A total of 350 teachers (295 females and 55 males) or 86.6% completed the evaluation form. This group, consisting of classroom

and special education teachers were the subjects for the study. The characteristics of this sample were as follows: median age: males 30-35 years, females 36 years or older; median years' experience in teaching: both males and females -10 years or less; median education level: males -MS degree; females -5-10 hours beyond a BS.

Student Progress Report

This report was for an above average student (i.e., mostly A's and B's) in the basic subjects, such as reading, language, and mathematics, and special subjects such as art and music. Grades in personal and social growth, work habits, and attitudes for the good conduct student were mostly A's and B's with some C's, whereas the poor conduct student's grades were C's and D's with a few F's. The attendance report of the two students also differed. The good conduct student's attendance record showed few absences or times tardy while the poor conduct student was frequently absent of tardy. These manipulations were designed to present a student who was either well adjusted to the school regime or had a conduct problem The student's name on the report was that of a fictitious boy or girl in the grade instructed by the teacher.

Student Photographs

A colored photograph (head and neck only) of a fifth grade boy or girl was attached to each Student Progress Report. Fifth grade students were selected for the photograph because facial features have largely stabilized by the fifth grade, but a fifth grader doesn't appear to be so disparate in maturity that a teacher would question the child's age after viewing his photograph. The photographs had been previously rated for physical attractiveness by 20 college students using two procedures. The first procedure involved rating each photograph on a seven point scale

ranging from 1- very unattractive to 7- very attractive. Three groups of photos resulted--high, moderate, and low attractive. The second procedure was a Q sort technique in which the raters were asked to place each of the pictures in a low, moderate, or high attractiveness group. The agreement between the two procedures was nearly perfect. These procedures resulted in three boys' and girls' pictures in each of the three categories of attractiveness. The three pictures of a boy or birl within each level of attractiveness permitted some randomization in the photograph which was attached to the Teacher Evaluation Form and thus provided an additional control for those subtle features of attractiveness which were not controlled in the picture.

Teacher Evaluation Form

This form asked the teacher to rate the student on each of the following: IQ (1-An IQ of 90-100 to 5--An IQ of over 130); grade point average (1--a GPA of 1.5-2.0 to 5--a GPA of 3.5-4.0), percentile rank in class (1--below the 25th percentile to 4--above the 75th percentile); highest level of education this student would attain (1--finish high school to 6--M.D. or Ph.D. degree); vocation (1-- laborer or domestic work to 7--a profession); and leadership potential (1--little or none to 5--very high). The teacher was also asked to write two summary statements about the student: one statement was to characterize the student with respect to personal attitudes and the second statement was to evaluate the student in terms of work habits.

Procedure

Each teacher was given a brown envelope containing a letter, the Student Progress Report with attached photograph, the Teacher Evaluation Form, and a second brown envelope to use in returning the materials. The

letter noted the ever present controversy concerning the usefulness of student report forms and indicated that the researchers were attempting to obtain some information from teachers about the usefulness of student report forms and the incorporation of this information into a permanent record file.

Teachers were asked to examine the attached Student Progress Report and provide the information requested. The importance of a personal evaluation by the teacher and the precautions taken to insure his anonymity were stressed. The teachers were further instructed to place their completed evaluation and the Student Progress Report in the attached brown envelope and return the envelope to their school secretary.

Results[2]

Since male teachers comprised only a small portion of the sample, a *t* test was used to determine whether sex differences between teacher ratings were present. The resulting *t* value was nonsignificant, so sex of teacher was not included as a factor in the analyses. Unequal N analyses of variance were used to evaluate the effects of physical attractiveness, sex of child, conduct level, teacher grade level, and the relationship of teacher characterization. Means of the ability measures for all analyses are presented in Tables 1-4.

The first analysis consisted of a series of 3 (level of attractiveness) x 2 (sex of child) x 2 (conduct level) analyses of variance on teacher ratings of IQ, grade point average, percentile rank, level of training, vocational choice, and leadership potential. Conduct of the child appeared as a significant determinant of teachers' ratings of IQ ($F=14.55$, $df=1/338$, $p<.0002$), percentile rank ($F=10.12$, $df=1/338$, $p<.0017$), level of training

(F=46.07, df=1/338, $p < .0001$), and leadership potential (F=175.74, df=1/338, $p < .0001$). The means for each of the measures, presented in Table 1, reveal that children with good conduct, regardless of sex, were consistently rated higher on ability, measures, aspirations, and leadership potential, supporting the second prediction. The nonsignificant effects for attractiveness and sex of child are contrary to the predictions made with respect to these effects.

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Insert Table 1 about here

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A significant Sex of Child x Counduct interaction was present for predicted IQ rating (F=3.64, df=1/338, $p < .05$). The simple effects analysis showed that girls with poor conduct were rated as having higher IQ's than girls with good conduct (F=4.35, df=1/338, $p < .05$). The difference between between good and poor conduct boys was nonsignificant ($F < 1$), and sex differences were also nonsignificant.

Grade level of the teacher was added to the three previous factors in a second series of ANOVA's to examine rating differences between teachers in the various grades. Conduct was again a significant determinant of teacher ratings of ability measures. But teachers in the various grades differed on their predictions of the child's level of training beyond high school (F=4.35, df=2/313, $p < .01$). Primary teachers predicted a lower level of post high school training than intermediate or special education teachers. The latter two groups did not significantly differ from each other. The teachers tended to predict higher levels of post high school training for boys (F=3.16, df=1/313, $p < .07$).

The interaction between conduct and grade level of teachers was significant for predicted vocational choice (F=4.16, df=2/313, $p < .01$) and leadership potential (F=5.17, df=2/313, $p < .006$). The interaction means are presented in Table 2. Simple effects analysis of the interaction for leadership potential showed that poor conduct students were rated as having lower leadership potential than good conduct students by primary teachers (F=71.97, df=1/338, $p < .001$), intermediate teachers (F=36.06, df=1/338, $p < .001$), and special education teachers (F=14.45, df=1/338, $p < .001$). A similar relationship was found for predicted vocational choice.

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Insert Table 2 about here

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The teachers' written descriptions of students with respect to personal attitudes and work habits were evaluated with a content analysis. Three categories of students resulted--Super-star, Fun-lover, and Rebel. A general description of the Super-star included such phrases and adjectives as positively oriented, happy, achievement oriented, well-accepted, dependable, out-going, independent, conscientious, cooperative, serious-mature, etc. The Fun-lover was described as social-oriented, courteous, pleasant, anxious to please, easy to get along with, needs external support, needs some improvement, has some trouble following directions, etc. The Rebel was characterized as disrespectful, slow, indifferent, rebellious, lacking self control, fantasizes a lot, etc.

A third series of ANOVA's assessed the effects of teacher descriptions of student's personal attitudes, sex of child, and level of attractiveness. Teacher descriptions of students significantly influenced ratings on grade

point average, percentile rank, predicted vocational choice, level of post high school training and leadership potential (see Table 3). Comparisons

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Insert Table 3 about here

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of means presented in Table 3, using a Neuman Keuls' analysis, revealed significant differences between the three groups for predicted vocational choice, level of post high school training, and leadership potential. The Fun-lover and Rebel were not significantly different on measures of grade point average and percentile rank, but both groups were rated lower than the Super-star.

Teacher characterization of student's work habits and attitudes replaced personal attitudes in a fourth series of ANOVA's. Significant differences were found for grade point average and level of post high school training (see Table 4). Individual comparisons of means revealed that higher ability was attributed to the Super-star than to the other two groups.

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Insert Table 4 about here

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Discussion

The effect of teacher expectancy on predictions of children's ability was quite evident in the present study. However, teacher ratings were influenced more by conduct level of the child than physical attractiveness. Children with low grades in personal and social growth, work habits, and attitudes, indicating conduct problems, were predicted to have less ability and lower aspirations than children with acceptable conduct, regardless of their level of physical attractiveness or sex. If one assumes that

teachers are concerned with presenting subject matter content to the student, then those behaviors on the part of the child, which facilitate teaching should be more highly valued (Beilin, 1959). Conduct of the child is one determinant of teacher effectiveness. Teachers know from classroom experience that teaching is a difficult task when problem children continually interrupt and interfere with subject matter presentations. Therefore, it is reasonable to expect that teachers may predict lower levels of aspiration for these children because of a related motivational problem. However, the problem child appears to bias the teacher to the extent that this child is also rated lower in ability. This would suggest that problem children not only fare less well in the classroom but appear to have the stigma of a "self-fulfilling prophecy". Because the child is a problem child, one can't expect him to be successful in vocational endeavors or to possess leadership ability.

The failure to replicate the attractiveness effect reported by Clifford and Walster (1973) was probably the result of several factors. Information on the child's conduct was not provided to teachers in the Clifford and Walster study, therefore the attractiveness variable was not pitted against what appears in the present study to be a most pervasive biasing factor in teacher evaluations. Secondly, the Clifford and Walster study sampled only fifth grade teachers, whereas the present study used teachers in grades one through six. It is certainly possible that fifth grade teachers are more aware of physical attractiveness since the baby-like features of younger children are replaced by more adult-like features of the fifth grader. Also, Clifford and Walster's sample of teachers were from Missouri where student photographs are part of the student record. These teachers may have been more accustomed to attending to student

photographs than the sample of teachers in the present study who were from schools where photographs were not attached to student records. Finally, Clifford and Walster used only the two extremes of attractiveness--high and low--while the present study incorporated a third level of moderate or average attractiveness which may have reduced the attractiveness effect. It is not clear from the Clifford and Walster study how divergent the two extremes in physical attractiveness actually were. This is one of the problems in comparing studies on physical attractiveness. If the end points of the attractiveness scale are not described in the research, one has no clear indication of the difference in physical attractiveness.

Although one can argue that conduct is a correlate of the dependent measures since teachers often consider conduct in assigning grades, this premise is not well supported in the present study. All of the students, regardless of their conduct record, were above average students with respect to academic ability. The record presented to half of the teachers was one of an academically capable student who was experiencing some conduct problems. Thus, the teacher was not assigning a grade, rather the teacher was evaluating a record. The most parsimonious explanation would seem to be that in the presence of an equally or more reliable predictor, conduct was the preferred predictor, indicating the presence of teacher bias with respect to student conduct.

The prediction by teachers that poor conduct girls would be more intelligent than girls with acceptable conduct suggests that the rather passive, quiet girl is not viewed as possessing the intellectual capacity of one who perhaps is more assertive and less self-controlling. Further, girls who have high achievement motivation take on some characteristics of the male role (Parke, 1969). Thus one would assume that these girls would

receive lower conduct ratings. Interestingly, the lower status of females in our culture appeared to emerge in the tendency by teachers to predict higher levels of post high school training for boys. These findings give some tentative support to Bardwick's (1971) argument that girls who deviate from the stereotypic sex-role pattern are more likely to be higher in creativity and need for achievement than more traditional bound sex-typed females. Furthermore, the present study provides support for the assumption that teachers, as socializing agents, tend to credit the male with higher instrumental behavior.

In summary this study shows that children who are achievement oriented, accepted, cooperative, dependable, and self-controlled are preceived by teachers to be more academically capable and likely to achieve greater vocational success. It would appear that children with good conduct are the "chosen ones" in the elementary school.

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Footnotes

[1]The authors wish to thank Steve Freeman and Sue Lynch for their assistance in the data collection.

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[2]Complete tables of means and standard deviations for all analyses can be obtained by request from the first author.

TABLE 1

Means of Ability Measures for Two Levels of Conduct

Ability Measure	Good Conduct $\bar{X}$	Poor Conduct $\bar{X}$
Grade Point Average	3.67	3.34
Percentile Rank	3.49	3.24
Level of Post High School Training	3.61	2.75
Predicted Vocational Choice	5.24	4.15
Leadership Potential	3.75	2.49

TABLE 2

Conduct x Grade Level Interaction Means for

Measures of Predicted Vocational Choice and Leadership Potential

Ability	Good Conduct			Poor Conduct		
Measure	Primary	Intermediate	Special	Primary	Intermediate	Special
	$\bar{X}$	$\bar{X}$	$\bar{X}$	$\bar{X}$	$\bar{X}$	$\bar{X}$
Predicted Vocational Choice	5.32	5.14	5.26	3.78	4.59	4.41
Leadership Potential	3.82	3.74	3.58	2.28	2.65	2.89

TABLE 3

Means and F Ratios of Ability Measures for Three Categories of Students Based on Teacher Characterization of Student's Personal Attitudes

Ability Measure	Super-star $\bar{X}$	Fun-lover $\bar{X}$	Rebel $\bar{X}$	F	df	p <
Grade Point Average	3.74	3.46	3.27	7.19	2,247	.01
Percentile Rank	3.53	3.35	3.25	3.52	2,247	.05
Predicted Vocational Choice Level of Post High School Training	5.36	4.78	3.90	19.65	2,247	.01
Leadership Potential	3.67	3.38	2.57	18.20	2,247	.01
	3.70	2.77	1.41	129.76	2,247	.001

TABLE 4

Means and F Ratios of Ability Measures for Three Categories of Students Based on Teacher Characterization of Student's Work Habits and Attitudes

Ability Measure	Super-star $\bar{X}$	Fun-lover $\bar{X}$	Rebel $\bar{X}$	F	df	p <
Grade Point Average	3.77	3.45	3.40	5.95	2,298	.01
Level of Post High School Training	3.79	3.05	2.76	18.54	2,298	.001